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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,076	08/25/2000	Siamack Nemazie	Nemazie-01US	5669
27728	7590	12/14/2004	EXAMINER	
NGUYEN, STEVEN H D				
ART UNIT		PAPER NUMBER		
		2665		

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SAN JOSE, CA 95113

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/648,076	NEMAZIE, SIAMACK <i>(A)</i>	
	Examiner Steven HD Nguyen	Art Unit 2665	
<b>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</b>			
<b>Period for Reply</b>			
<b>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</b>			
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>			
<b>Status</b>			
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>09 August 2004</u> . 2a) <input checked="" type="checkbox"/> This action is <b>FINAL</b> .                    2b) <input type="checkbox"/> This action is non-final. 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
<b>Disposition of Claims</b>			
4) <input checked="" type="checkbox"/> Claim(s) <u>1-5</u> is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) <input type="checkbox"/> Claim(s) _____ is/are allowed. 6) <input checked="" type="checkbox"/> Claim(s) <u>1-5</u> is/are rejected. 7) <input type="checkbox"/> Claim(s) _____ is/are objected to. 8) <input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.			
<b>Application Papers</b>			
9) <input type="checkbox"/> The specification is objected to by the Examiner. 10) <input type="checkbox"/> The drawing(s) filed on _____ is/are: a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) <input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
<b>Priority under 35 U.S.C. § 119</b>			
12) <input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) <input type="checkbox"/> All    b) <input type="checkbox"/> Some * c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____. 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.			
<b>Attachment(s)</b>			
1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.		4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.	

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claims 3 and 5, the variables n, k, k' are vague and indefinite because it's unclear what constitutes for it.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (USP 5276425).

Swanson discloses a switching network (Fig 3, Ref 200) comprising a first stage of switches (Fig 3, Ref 205 has  $m = 9$  ( $n = 5 \times k = 9$ ) switches, 220-1 to 220-9) having input lines and output lines including  $m$  ( $n \times k$ ) switches, wherein  $m$  is an integer number,  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a second stage of switches (Fig 3, Ref 210 has  $m = 9$  ( $k' = x k' = 9$ )

switches) comprising of  $m (k' \times k')$  switches,  $k'$  is an integer number representing the number of inputs and outputs a third stage of switches (Fig 3, Ref 215 has  $m = 9$  ( $k = 9 \times n = 5$ ) switches, 220-1 to 220-9) comprising of  $m (k \times n)$  switches wherein  $k' = k$  to allow using  $m$  switches in the second stage (See  $k' = k = 9$  when  $(m = 9 * ((k' = 9) / (m = 9))) = (k = 9)$ ). However, Swanson fails to disclose a function to select  $k'$  in such way that  $m * Q(k'/m) \geq k$  (where  $Q(x/y)$  denotes the quotient of dividing  $x$  by  $y$ ). However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  in order to have  $m$  switches in each stage into Swanson's system. The motivation would have been to prevent the time of rearrange the connection when a request for point-to-point connection is make via a network.

5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay (USP 5038343).

Lebizay discloses a switching network comprising  $m$  identical modules (Fig 5), a module (Fig 5) includes an input stage (Fig 5, Ref Stage 1 has a ( $n = M \times k = M$  module) comprising of a ( $n \times k$ ) switch wherein  $n$  is an integer number representing the number of input lines and  $k$  is an integer number representing the number of output lines; a middle stage (Fig 5, Ref Stage 2 has a ( $n = M \times k = M$ , module) comprising of a ( $k' \times k'$ ) switch,  $k'$  is an integer number representing the number of inputs and outputs; an output stage ( $n = M \times k = M$ , modules) comprising of a ( $k \times n$ ) switch. However, Lebizay fails to disclose a function wherein  $k$ ,  $k'$ , and  $m$  satisfy  $m * Q(k'/m)k \geq k$ . However, it would have been obvious to one of ordinary skill in the art at the time of invention was made to apply a function to select  $k' = k$  in order to have  $m$  switches in each stage

into Lebizay's system. The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

***Response to Arguments***

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, the prior arts such as Swanson/Lebizay disclose a switch network comprising a three stage switching which includes input, output lines and input, middle and output stage. The teaching of Swanson/ Lebizay performs the claimed invention by selecting  $k' = 9$  and plug these numbers into the function wherein  $m = 9$ , the connection between these stages will perform the function which is described in the claim  $m * Q(k'/m) \geq k, k' (=9) \geq m (=9) * Q(k' (=9)/m(=9))$ . So  $k' = k = 9$ . Therefore, it would have been of obvious to one of ordinary skill in the art to apply a function in order to select  $k' = k = m * Q(k'/m)$  by suggestion of Fig 3 of Swanson and Fig 5 of Lebizay. The motivation would have been to provide a fast switching network by finding, reserving and setting the path for the signals.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen  
Primary Examiner  
Art Unit 2665  
12/3/04